What is claimed is:

- 1. A method of inhibiting proliferation of malignant cells, comprising administering to the malignant cell at least one E-domain peptide agent.
- 2. The method of Claim 1, wherein the E-domain peptide agent is selected from the group consisting of: a trout E-domain peptide, an E-domain peptide homolog, and an E-domain peptide fusion protein.
- 3. The method of Claim 2, wherein the E-domain peptide is an E-domain peptide of a rainbow trout.
- 4. The method of Claim 3, wherein the trout E-domain peptide is selected from the group consisting of: Ea-2 domain peptide (SEQ ID NO:2) and Ea-4 domain peptide (SEQ ID NO:4).
- 5. The method of Claim 4, wherein the E-domain peptide agent is administered in a pharmaceutical composition.
- 6. A method of inhibiting the proliferation of malignant cells, comprising administering to the malignant cells a nucleic acid encoding an E-domain peptide agent.

- 7. The method of Claim 6, wherein the E-domain peptide agent is selected from the group consisting of: a trout E-domain peptide, an E-domain peptide homolog, and an E-domain peptide fusion protein.
- 8. The method of Claim 7, wherein the E-domain peptide is an E-domain peptide of a rainbow trout.
- 9. The method of Claim 8, wherein the trout E-domain peptide is selected from the group consisting of: Ea-2 domain peptide (SEQ ID NO:2) and Ea-4 domain peptide (SEQ ID NO: 4)
- 10. The method of Claim 9, wherein the nucleic acid encoding the E-domain peptide is administered in a pharmaceutical composition.
- 11. A method for reducing the invasiveness of malignant cells, comprising administering to the malignant cells an E-domain peptide.
- 12. The method of Claim 11, wherein the E-domain peptide agent is selected from the group consisting of: a trout E-domain peptide, an E-domain peptide homolog, and an E-domain peptide fusion protein.

- 13. The method of Claim 12, wherein the E-domain peptide is an E-domain peptide of a rainbow trout.
- 14. The method of Claim 13, wherein the trout E-domain peptide is selected from the group consisting of: Ea-2 domain peptide (SEQ ID NO:2) and Ea-4 domain peptide (SEQ ID NO: 4).
- 15. The method of Claim 14, wherein the E-domain peptide agent is administered in a pharmaceutical composition.
- 16. A method for reducing the invasiveness of malignant cells, comprising administering to the malignant cells a nucleic acid encoding an E-domain peptide agent.
- 17. The method of Claim 16, wherein the E-domain peptide agent is selected from the group consisting of: a trout E-domain peptide, an E-domain peptide homolog, and an E-domain peptide fusion protein.
- 18. The method of Claim 17, wherein the E-domain peptide is an E-domain peptide of a rainbow trout.

- 19. The method of Claim 18, wherein the trout E-domain peptide is selected from the group consisting of: Ea-2 domain peptide (SEQ ID NO:2) and Ea-4 domain peptide (SEQ ID NO:4)
- 20. The method of Claim 19, wherein the nucleic acid encoding the E-domain peptide is administered in a pharmaceutical composition.